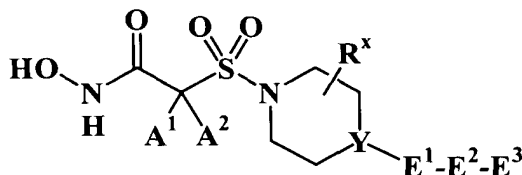


# ABSTRACT OF THE DISCLOSURE

This invention is directed generally to proteinase (also known as “protease”) inhibitors, and, more particularly, to piperidinyl- and piperazinyl-sulfonylmethyl hydroxamic acids that, *inter alia*, inhibit matrix metalloproteinase (also known as “matrix metalloprotease” or “MMP”) activity and/or aggrecanase activity. Such hydroxamic acids generally correspond in structure to the following formula:



(I)

(wherein A<sup>1</sup>, A<sup>2</sup>, Y, E<sup>1</sup>, E<sup>2</sup>, E<sup>3</sup>, and R<sup>x</sup> are as defined in this specification), and further include salts of such compounds. This invention also is directed to compositions of such hydroxamic acids, intermediates for the syntheses of such hydroxamic acids, methods for making such hydroxamic acids, and methods for treating conditions (particularly pathological conditions) associated with MMP activity and/or aggrecanase activity.